

Providing an Information Economy in the Northern Rivers region of NSW

Northern Rivers includes the local government areas of Nymboida, Copmanhurst, Grafton City, Ulmarra, Maclean, Richmond River, Casino, Kyogle, Lismore City, Ballina, Byron, and Tweed. The district occupies the top eastern corner of New South Wales.

Statistical overview

The Northern Rivers region covers some 14 Statistical Local Areas. Approximately 21 per cent of the region's population used the Internet at home and 28 per cent from any site during Census night. Internet use in Northern Rivers was only marginally lower than for Regional New South Wales as a whole. The income profile of Regional New South Wales is slightly higher than for Northern Rivers as is the proportion of people living in families comprising a couple with children.

Internet use in Northern Rivers, 2001 Census			
	Total Population	Internet use	
		At home	From Any Site
Tweed (A) – Pt. A	47,540	20%	26%
Lismore (C) – Pt. A	30,112	22%	32%
Ballina (A)	37,215	25%	33%
Byron (A)	30,226	26%	35%
Kyogle (A)	9,178	15%	21%
Lismore (C) – Pt. B	11,793	25%	33%
Richmond Valley (A) – Casino	10,028	15%	21%
Richmond Valley (A) – Balance	10,298	16%	21%
Tweed (A) – Pt. B	26,885	21%	27%
Copmanhurst (A)	4,162	18	24
Grafton (C)	16,769	18	25
Maclean (A)	17,439	19	24
P. Waters (A) – Nymboida	4,261	21	26
P. Waters (A) - Ulmarra	6,355	16	21
Total	262,261	21%	28%
Regional NSW	2,338,246	22%	30%
New South Wales	6,372,214	28%	36%

Background

[Norlink Communications](http://www.norlink.net.au/)¹, a 'last mile telco', is regionally owned and focused to provide high quality, low cost, fast and accessible telecommunications services. It is based in the Northern Rivers of NSW and has over five years of research and goodwill. It has obtained four separate grants totalling about \$2m under the Australian Government *Networking the Nation* program over that period. The first three grants involved planning and awareness and skills raising exercises and the current one is described under the *eTowns* heading below.

Norlink has been established with the financial support of Government, both Federal and State. It has widespread support of local government throughout the region as well as many of its peak social and economic development agencies. The economic and social development of the Northern Rivers region is a key objective. A number of partners will be utilised to achieve the desired outcomes.

eTowns Project

Norlink's *eTowns Project* is the initial stage of the company's overall regional telco strategy. Norlink *eTowns* has secured \$1.5m in funding from the Australian Government *Networking the Nation* program and \$250,000 from the NSW State Government.

"*eTown*" is the phrase Norlink has coined for the rejuvenation of small regional townships through the use of advanced telecommunications infrastructure to deliver

¹ <http://www.norlink.net.au/>

cost effective high bandwidth services. Norlink will work closely with these communities to identify and develop opportunities that will provide economic and social development through the use of telecommunications. It is planned that town steering committees facilitated by the local council and supported by Norlink will drive user acceptance and service take up.

Initially, services will be provided to Lismore, Mullumbimby, Maclean and Kyogle.

Communities are able to actively participate in the *eTowns* project by:

- Becoming part of the Steering Committees helping to identify economic and social development projects that will take advantage of the advanced telecommunications being installed in the Northern Rivers region.
- Joining a Research Focus Group (on price and product modelling) or an Evaluation Focus Group (surveys and meetings to evaluate the project).
- Nominating to participate in the trials when they are first rolled-out in their towns.

Public meetings have been held in Mullumbimby, Maclean and Kyogle and the town Councils and Norlink have each signed a Memorandum of Understanding to work together to make the project a success.

Norlink's evolutionary path will be guided and supported by the implementation of the *eTowns* project and the active participation and contribution of the communities, helping Norlink to understand and address the issues and impacts of deployment of this model across the region.

Through the establishment of the initial "*eTowns*" in the Northern Rivers region of NSW, Norlink will enhance and refine its business and delivery models as well as assist the growth of the economy of the selected local communities. Towns in Lismore and Mullumbimby are expected to expanded customer numbers by 150 in the first year of operation. By 2004 towns will also be equipped and new users signed up in Maclean and Kyogle. Fortuitous coverage from the four towns means that up to 12 towns should be able to access the project's services.

It is intended that the transition from the *eTown* phase to a full operational configuration will be an incremental step and require no structural changes when Norlink delivers a full commercial service and creates a sustainable enterprise as a core outcome.

As Norlink progresses through the implementation phase it will refine its long-term implementation strategies. This stage is the foundation for Norlink to build a small regional telco that will then expand throughout the region.

eTowns Project

The *eTowns* Project involves delivering broadband services through wireless technology to customers who install dishes on the roof or outside wall of their premises, linked to computer and telephone equipment inside and suitably equipped telecommunications towers at varying distances. Core services are initially expected to include:

- Broadband Internet Services: High speed/low delay Internet services, ranging from basic "always on" Internet access (at minimum 256k), with specific download limits (eg 500Mbytes) through to defined quality of service (QOS)

offerings that are required for corporate Internet connections. Norlink will provide both symmetrical (same speed in each direction) and asymmetrical (different speeds in up/down directions) based on the needs of its users.

- Voice Services: Norlink will offer a number of voice connection types to the network. From standard phone/fax connections through to advanced ISDN, connectivity will be available for small and large users.
- Virtual Private Networking (VPN): In addition to standard 'best effort' Internet traffic, Norlink will have the ability to 'nail up' specific bandwidth between any on-net users to create a VPN. Through its partners Norlink will also be able to offer interconnection to any VPN connection worldwide.

Potential future products and services Norlink will offer over the network infrastructure include:

- Centrex Services: The ability to provide PABX functionality (closed user groups, short dial strings etc) to users, allowing clients to reduce capital expenditure on PABX or Key systems while providing significant other cost benefits; and
- Trial Applications: Testing of video conferencing for health and education, which (should these prove successful) be commercialised for general use.

Community Technology Centres in the Northern Rivers

The towns participating in the eTowns project are also pursuing their initiatives to provide improved ICT access to their communities. For example Kyogle will connect to computers, the Internet, and a range of new training opportunities under the expanding network of the [Community Technology Centres \(CTC\) Program](#)² jointly funded by the NSW (\$7.5m) and Australian (\$9.55m) Governments.

Through the Northern Rivers CTCs, 20 towns currently have or will have access to computers and technology through outreaches linked to the current, main Community Technology Centre sites at Clunes, Kyogle, Mullumbimby, Nimbin, Pottsville, Richmond River (Evans Head and Woodburn) and Tweed Valley (Uki).

Further CTCs may emerge in the region, including through the stimulus of the Norlink *eTown* project.

CTCs offer a range of services and programs to the towns in which they are situated including:

- Access to computers and software for personal, study and professional purposes;
- Internet access for the local community;
- Access to other Internet services such as web hosting, email, ISP services;
- Access to online government services;
- Business services for local businesses and community organisations;
- Facilities for access to distance education and training services, including high speed access to online education courses and videoconferencing;
- 'Hot desking' for employees involved in teleworking;
- IT training in desktop applications, e-commerce, multimedia and the Internet;
- Information and research service for local business and farmers;

² <http://www.ctc.nsw.gov.au/>

- IT based office services for business, including start-up business;
- Meeting room facilities providing access to technology such as data projectors, computers with presentation software, videoconferencing;
- Multimedia development facilities;
- Technology advice and support services to local businesses and farmers and agencies; and
- Videoconferencing facilities.

The CTC Program Support Unit managed by the NSW Office of Information Technology plays a vital role in helping CTCs realise their full potential, while also brokering an increasing range of new income-generating opportunities to bolster longer term self-sustainability. Networking and support in a range of technical and strategic areas continues to be a high priority of the program.

The CTCs in the Northern Rivers have a particular interest in multimedia development and co-operating with each other in building the skills and relationships that will support the growing multimedia industries of the Northern Rivers.